

LAND APPLICATION SITE

TIMOTHY G. BAUGHER

GRTGB 1 - 5

GREENE COUNTY

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 9-29-17 between Steven Baugher referred to here as "Landowner", and Recyc Systems, Inc; referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Greene Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.. Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>
<u>38-A-107</u>			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Steven D Baugher Steven D. Baugher 434 987 5119
Landowner - Printed Name, Title Signature Mailing Address & Phone Number

834 Miller Rd Rockersville
VA 22968

Permittee:

Recyc Systems, Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Strucko
Permittee - Authorized Representative
Printed Name

Strucko
Signature

PO Box 562 Remington, Virginia 22734
Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Recyc Systems, Inc

County or City: Greene

Landowner: Steven Baugher

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

Landowner's Signature Steven D. Baugher Date 9/29/17

Farm Operator Signature Steven Baugher Mailing Address & Phone Number 834 Miller Mtn Rd Rockwellville VA 22968

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A. This land application agreement is made on 11-4-14 between Timothy Baugher referred to here as "Landowner", and Recyc Systems, Inc, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Ruckersville Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>38-A-107</u>			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☐ The Landowner is the sole owner of the properties identified herein.
☒ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
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The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

<u>Timothy Baugher</u>	<u>Timothy Baugher</u>	<u>364 Miller mtn Road Ruckersville</u>
Landowner - Printed Name, Title	Signature	Mailing Address & Phone Number <u>54229</u>

Permittee:

Recyc Systems, Inc, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

<u>[Signature]</u>	<u>[Signature]</u>	<u>PO Box 562 Remington Virginia 22734</u>
Permittee - Authorized Representative Printed Name	Signature	Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Recyc Systems, Inc

County or City: Greene

Landowner: Storn & Timothy Bryan

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

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 - c. Other animals shall be restricted from grazing for 30 days;
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6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

[Signature]
Landowner's Signature

11-4-14
Date

[Signature]
Farm Operator Signature

364 Miller mtw Road Burkholder
Mailing Address & Phone Number

UP, 22966

FARM DATA SHEET

SITE NAME:	Timothy G. Baugher	COUNTY:	Greene
OWNER:	Timothy G. Baugher and Steven D. Baugher	OPERATOR:	Steven Baugher
OWNER'S ADDRESS:	364 Miller Mtn. Road Ruckersville, VA 22968	OPERATOR'S ADDRESS:	364 Miller Mtn. Road Ruckersville, VA 22968
OWNER'S TELEPHONE:	434-985-6691	OPERATOR'S TELEPHONE:	434-985-6691
GENERAL FARM TYPE:	Pasture	CELL PHONE:	434-989-5119
# CATTLE:	50	EMAIL:	-
LAGOON or SLURRY:	None	LATITUDE:	38.291
TOPO QUAD:	Stanardsville	LONGITUDE:	78.397
COMMENTS:	METHOD OF DETERMINATION:		Online Maps

BB 

RECYC SYSTEMS, INC

FIELD DATA SHEET

Field Identification	DEQ Control ID	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
			Water Table	Bed Rock/Shallow	Surf/ Leach	Freq Flood			
GRTGB 1	51079-00153-0000	18.3	Cn Nov.-Apr. Kn Nov.-May	-	-	Cs Feb.-May	RA 26	38-A-107	T 381 F 2
GRTGB 2	51079-00154-0000	22.6	BaB Jan.-Apr. Kn Nov.-May	-	-	-	RA 26	38-A-107	T 381 F 3
GRTGB 3	51079-00155-0000	15.6	Kn Nov.-May	-	-	Cs Feb.-May	RA 26	38-A-107	T 381 F 4
GRTGB 4	51079-00156-0000	7.8	Hb Oct.-May Kn Nov.-May	AsD	-	Hb Oct.-May	RA 26	38-A-107	T 381 F 6
GRTGB 5	51079-00157-0000	12.1	Hb Oct.-May Kn Nov.-May	HxD	-	Hb Oct.-May	RA 26	38-A-107	T 381 F 5
TOTAL ACRES IN SITE		76.4							

Landowner Coordination Form

Permittee: Recyc Systems, Inc

Site Name: Timothy G. Baugher

Please Print

Signature not required on this page

[illegible]

Report Number: 17-275-0555

Account Number: 70594



"Every acre... Every year."™

7621 Whitepine Road, Richmond, VA 23237

Main 804-743-9401 • Fax 804-271-6446

www.waypointanalytical.com

Send To: Recyc Systems Inc
Susan Trumbo
8455 Whiteshop Road
Culpepper VA 22701

Grower: Timmy Baugher Greene
GRTGB

SOIL ANALYSIS REPORT

Analytical Method(s): SMP Buffer pH Mehlich 3 Loss On Ignition Water pH

Date Received: 10/02/2017

Date Of Analysis: 10/03/2017

Date Of Report: 10/03/2017

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
3	04667	5.6 H		143	111 VH			249 VH	203 M	2053 H		6.8		0.4	13.0
4	04668	4.5 M		126	59 H			248 VH	155 M	1557 H		6.8		0.3	10.0

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts		
	K %	Mg %	Ca %	Na %	H %	NO ₃ -N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate		
3	4.9	13.0	79.0		3.1			6.4 H	45 H						
4	6.4	12.9	77.9		3.0			3.6 H	35 H						

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc

by *Pauline McGeary*

Pauline McGeary

Report Number: 17-275-0555

Account Number: 70594



"Every acre... Every year"™

7621 Whitepine Road, Richmond, VA 23237

Main 804-743-9401 • Fax 804-271-6446

www.waypointanalytical.com

Send To: Recyc Systems Inc
 Susan Trumbo
 8455 Whiteshop Road
 Culpepper VA 22701

Grower: Timmy Baugher Greene
 GRTGB

Date Received: 10/02/2017

Date Of Report: 10/03/2017

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
3	Adjust pH to 6.8	0	0.0				0			0			
4	Adjust pH to 6.8	0	0.0				0			0			

Comments:

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Pauric McGroary

Report Number: 14-267-0577

Account Number: 70594



www.aleastern.com

A&L Eastern Laboratories

7621 Whiteline Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
SUSAN TRUMBO
8455 WHITESHOP RD
CULPEPER VA 22701

Grower:
TIMOTHY BAUGHER
GREENE CO

Submitted By: BB
Farm ID:

SOIL ANALYSIS REPORT

Analytical Method(s):
Mehlich 3

Date Received: 09/24/2014

Date Of Analysis: 09/25/2014

Date Of Report: 09/25/2014

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus				Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	Reserve ppm	Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
3 GRTGB	14624	6.4	H	150	33	M			62	L	169	H	1033	M			5.9	6.79	1.4	8.1
4 GRTGB	14625	4.0	M	121	12	VL			74	L	93	M	898	H			6.3	6.87	0.6	6.1

Sample ID Field ID	Percent Base Saturation					Nitrate		Sulfur		Zinc		Manganese		Iron		Copper		Boron		Soluble Salts		Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm	Rate	S ppm	Rate	Zn ppm	Rate	Mn ppm	Rate	Fe ppm	Rate	Cu ppm	Rate	B ppm	Rate	SS ms/cm	Rate	Cl ppm	Al ppm
3 GRTGB	2.0	17.4	63.8		17.2																		
4 GRTGB	3.1	12.7	73.6		10.6																		

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: A&L Eastern Laboratories, Inc

by *Paucie McGroary*

Paucie McGroary

Report Number: 14-267-0577

Account Number: 70594



www.aleastern.com

A&L Eastern Laboratories

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
SUSAN TRUMBO
8455 WHITESHOP RD
CULPEPER VA 22701

Grower:
TIMOTHY BAUGHER
GREENE CO

Submitted By: BB
Farm ID:

Date Received: 09/24/2014

Date Of Report: 09/25/2014

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
3 GRTGB	Adjust pH to 6.8	0	1.8				0						
4 GRTGB	Adjust pH to 6.8	0	1.0				0						

Comments:

Sample(s) : 4 Crop: Adjust pH to 6.8

Apply dolomitic lime to raise pH and improve the magnesium level

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Paulie McGroary

Report Number: 14-183-0510

Account Number: 70594



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A&L Eastern Laboratories

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
SUSAN TRUMBO
8455 WHITESHOP RD
CULPEPER VA 22701

Grower:
TIMOTHY G BAUGHER/GRTGB
GREENE CO

Submitted By: BB
Farm ID:

SOIL ANALYSIS REPORT

Analytical Method(s):
Mehlich 3

Date Received: 07/02/2014

Date Of Analysis: 07/03/2014

Date Of Report: 07/03/2014

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus				Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	Reserve ppm	Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
1	23107	3.7	M	109	30	L			139	M	171	M	1396	M			6.1	6.79	1.4	10.2
2	23108	4.5	M	123	71	H			182	VH	158	M	1924	H			6.7	6.88	0.5	11.9
3	23109	4.3	M	118	16	L			51	VL	262	H	1731	M			6.1	6.76	1.7	12.7
4	23110	4.0	M	118	12	VL			47	VL	187	H	1252	H			6.5	6.87	0.6	8.6
5	23111	5.5	H	140	74	H			763	VH	360	H	1493	M			6.2	6.76	1.7	14.1

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm	S ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	SS ms/cm	Cl ppm	Al ppm
1	3.5	14.0	68.4		13.7										
2	3.9	11.1	80.8		4.5										
3	1.0	17.2	68.1		13.7										
4	1.4	18.1	72.8		7.4										
5	13.9	21.3	52.9		12.2										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C - Cation Exchange Capacity

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Analysis prepared by A&L Eastern Laboratories, Inc.

by *Paucic McGroary*

Paucic McGroary

Report Number: 14-183-0510

Account Number: 70594



www.aleastern.com

A&L Eastern Laboratories

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
SUSAN TRUMBO
8455 WHITESHOP RD
CULPEPER VA 22701

Grower:
TIMOTHY G BAUGHER/GRTGB
GREENE CO

Submitted By: BB
Farm ID:

Date Received: 07/02/2014

Date Of Report: 07/03/2014

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
1	Adjust pH to 6.8	0	1.5				0						
2	Adjust pH to 6.8	0	1.0				0						
3	Adjust pH to 6.8	0	1.5				0						
4	Adjust pH to 6.8	0	1.0				0						
5	Adjust pH to 6.8	0	1.5				0						

Comments:

Sample(s) : 5 Crop: Adjust pH to 6.8

Cation Exchange Capacity may be over-estimated due to high potassium level.

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Paulie McGroary

Paulie McGroary

THE PLANNER IS NOT STATE CERTIFIED

Nutrient Management Plan Balance Sheet
(Fall, 2017-Winter, 2019)
Timothy G. Baugher
Planner: John Doe

Tract: 381 Location: Greene

[N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed]

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
2/GRTGB 1(N)	18/18	2017	Grass Pasture	50-30-0	0/0				50-30-0	N/A			
3/GRTGB 2(N)	23/23	2017	Grass Pasture	0-0-0	0/0				0-0-0	N/A			
4/GRTGB 3(N)	16/16	2017	Grass Pasture	50-0-0	0/0				50-0-0	N/A			
6/GRTGB 4(N)	8/8	2017	Grass Pasture	50-0-0	0/0				50-0-0	N/A			
5/GRTGB 5(N)	12/12	2017	Grass Pasture	50-0-0	0/0				50-0-0	N/A			

Commercial Application Methods:

br - Broadcast ba - Banded sd - Sidedress

Notes:

Soil Test Summary

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec. lime tons/Ac
381	GRTGB 1	18	2014-Su	M (30 P ppm)	H- (139 K ppm)	A&L MIII	6.1		
381	GRTGB 2	23	2014-Su	H (71 P ppm)	H (182 K ppm)	A&L MIII	6.7		
381	GRTGB 3	16	2017-Fa	H+ (111 P ppm)	VH (249 K ppm)	A&L MIII	6.8		
381	GRTGB 4	8	2017-Fa	H- (59 P ppm)	VH (248 K ppm)	A&L MIII	6.8		
381	GRTGB 5	12	2014-Su	H (74 P ppm)	VH (763 K ppm)	A&L MIII	6.2		

Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
381	381/2	GRTGB 1	18	Unison	IIb	II	II	II	
	381/3	GRTGB 2	23	Kinkora	V	V	Not Suited	Not Suited	
	381/4	GRTGB 3	16	Unison	IIIb	III	III	IV	
	381/6	GRTGB 4*	8	Elioak	V	IV	III	IV	High Leaching, Poor Drain
	381/5	GRTGB 5*	12	Elioak	IVb	III	III	III	Poor Drainage, Shallow so

* Do not apply manure or biosolids more than 30 days prior to planting. Apply commercial fertilizer nitrogen to row crops in split spring applications.

Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA

Farm Summary Report

Plan: New Plan Fall, 2017 - Winter, 2019

Farm Name: Timothy G. Baugher

Location: Greene

Specialist: John Doe

N-based Acres: 76.4

P-based Acres: 0.0

Tract Name: 381

FSA Number: 381

Location: Greene

Field Name: GRTGB 1

Total Acres: 18.30 Usable Acres: 18.30

FSA Number: 2

Tract: 381

Location: Greene

Slope Class: A Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Su-2014	6.1	M(30 P ppm)	H-(139 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
---------	--------	-------------

13	Cn	Codorus
36	Cs	Comus
15	Kn	Kinkora
36	UnA	Unison

Field Warnings:

Field Name: GRTGB 2

Total Acres: 22.60 Usable Acres: 22.60

FSA Number: 3

Tract: 381

Location: Greene

Slope Class: B Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method. Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Su-2014	6.7	H(71 P ppm)	H(182 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
7	BaB	Belvoir
11	EIC	Elioak
82	Kn	Kinkora

Field Warnings:

Field Name: GRTGB 3

Total Acres: 15.60 Usable Acres: 15.60

FSA Number: 4
Tract: 381
Location: Greene
Slope Class: B Hydrologic Group: D

Riparian buffer width: 0 ft
Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.8	H+(111 P ppm)	VH(249 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
2	Cs	Comus
5	EnC3	Elioak
32	Kn	Kinkora
57	UnB	Unison
5	UnC	Unison

Field Warnings:

Field Name: GRTGB 4

Total Acres: 7.80 Usable Acres: 7.80

FSA Number: 6

Tract: 381

Location: Greene

Slope Class: C Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Fa-2017	6.8	H-(59 P ppm)	VH(248 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
7	AsD	Ashe
59	EnC3	Elioak
27	EnD3	Elioak
6	Hb	Hatboro
2	Kn	Kinkora

Field Warnings:

Environmentally Sensitive Soils due to:

Soils with potential for leaching based on soil texture or excessive drainage

Soils with high potential for subsurface lateral flow based on soil texture and poor drainage

Soils with percent slope in excess of 15%

Field Name: GRTGB 5

Total Acres: 12.10 Usable Acres: 12.10

FSA Number: 5

Tract: 381

Location: Greene

Slope Class: C Hydrologic Group: D

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Su-2014	6.2	H(74 P ppm)	VH(763 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
3	EIB	Elioak
66	EIC	Elioak
11	Hb	Hatboro
16	HxD	Hazel
4	Kn	Kinkora

Field Warnings:

Environmentally Sensitive Soils due to:

Soils with high potential for subsurface lateral flow based on soil texture and poor drainage

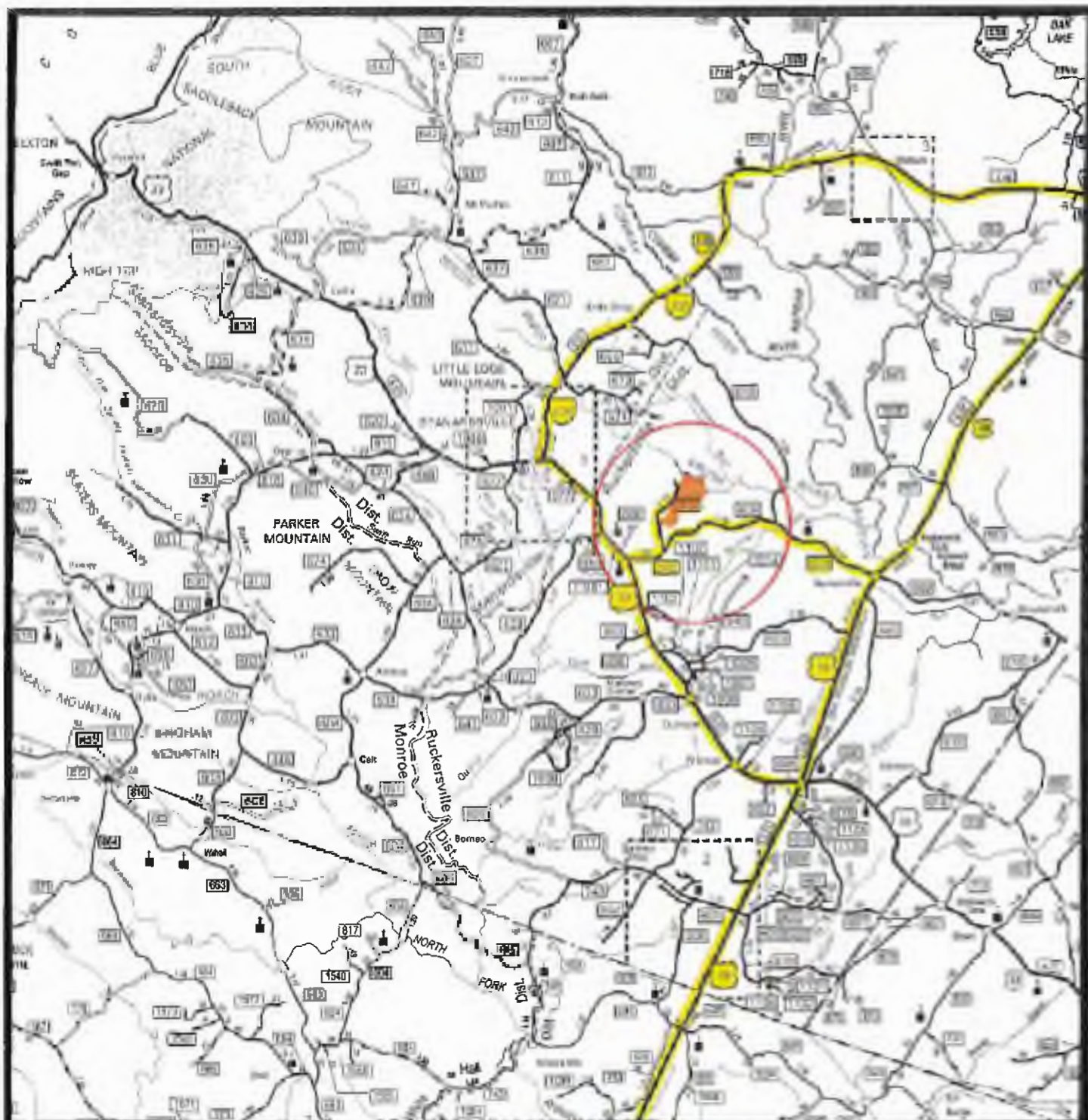
Shallow soils less than 41 inches deep likely to be located over fractured or limestone bedrock

Soils with percent slope in excess of 15%

M P

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(Biosolids Land Application)



Scale: 1" = 2 miles

GR1GB 1-5

VICINITY MAP

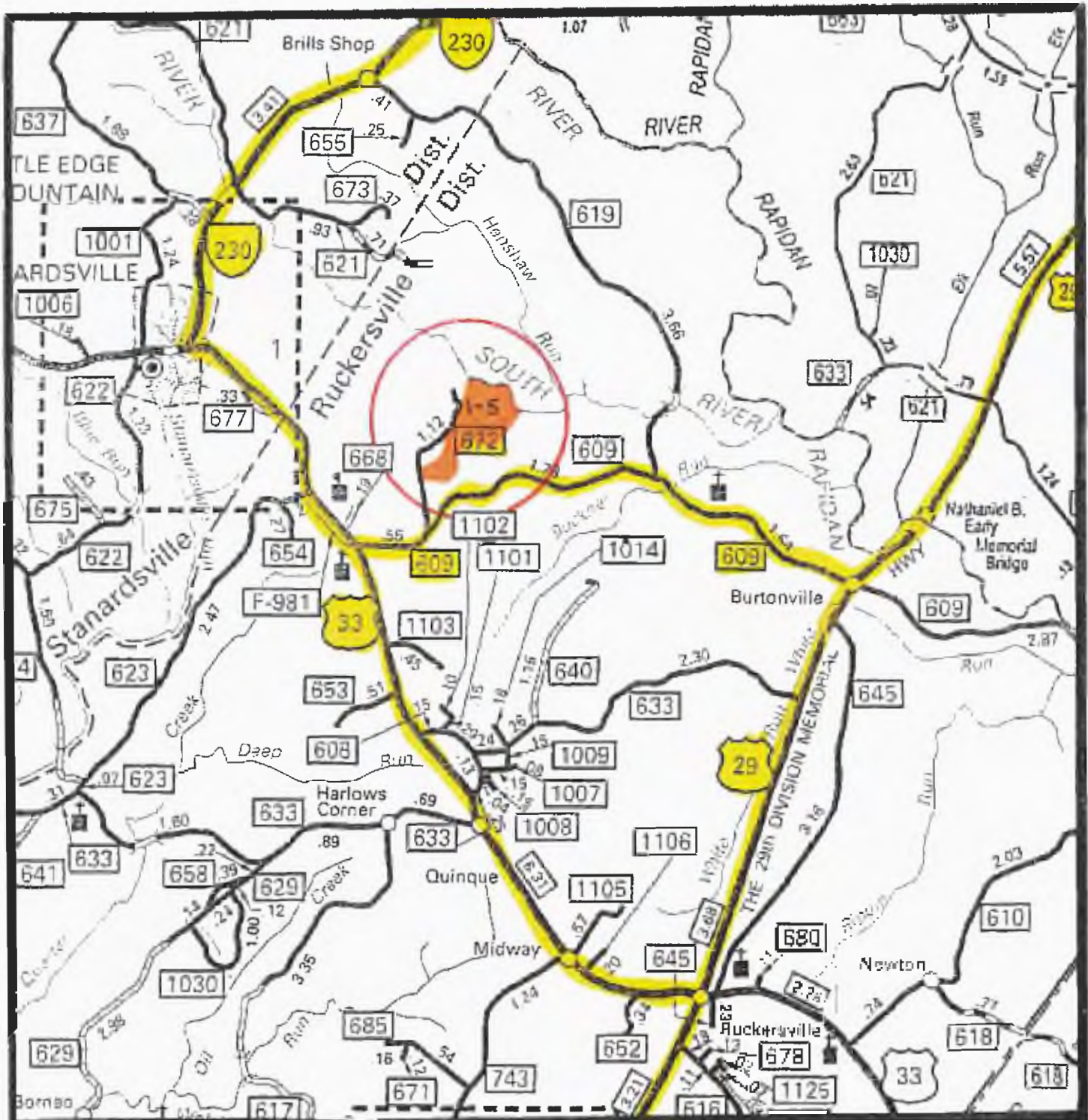
10-18-17



Recyc Systems™

Inc.

(Biosolids Land Application)



Scale: 1" = 1 mile

GRICE 1-5

VICINITY MAP

10-18-17





1 in = 660 feet

ADJOINING LANDOWNERS

Timothy G. Baugher

GREENE COUNTY

Tax Map	Parcel #	Owner Name(s)
28 4	C	Merle W. Fallon Trustee of the James W. Hazel GST Tr. And James and Sarah Hazel
38 A	104A	Harold Morris and Wanda Morris Barden, Trustee of the William and Ella Morris Irrevocable Trust
	105	Harold Morris and Wanda Morris Barden, Trustee of the William and Ella Morris Irrevocable Trust
	105A	Gregory H. and Audrey M. Morris
	107D	Timothy & Mary Baugher
	107F	Timothy Scott Baugher
	107G	Kevin Wayne Baugher
	108D	Charles F. & Patsy S. Donour
	108B	Trevor C. Shifflett
	108C	Reade F. Marchette and Victor D. Shifflett
38 14	1	B. Michael Powell
	2	Bryan Michael and Sarah Morris Powell
	A1	Christina M. and James Stelling
	A2	Christina M. and James Stelling
39 A	1	Thomas Eddins Trustee of the Thomas Eddins Revocable Trust and Carolyn Eddins
	4G	Steven L. & Codie C. Peters

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Soil Map—Greene County, Virginia



Scale: 1"= 660 ft.

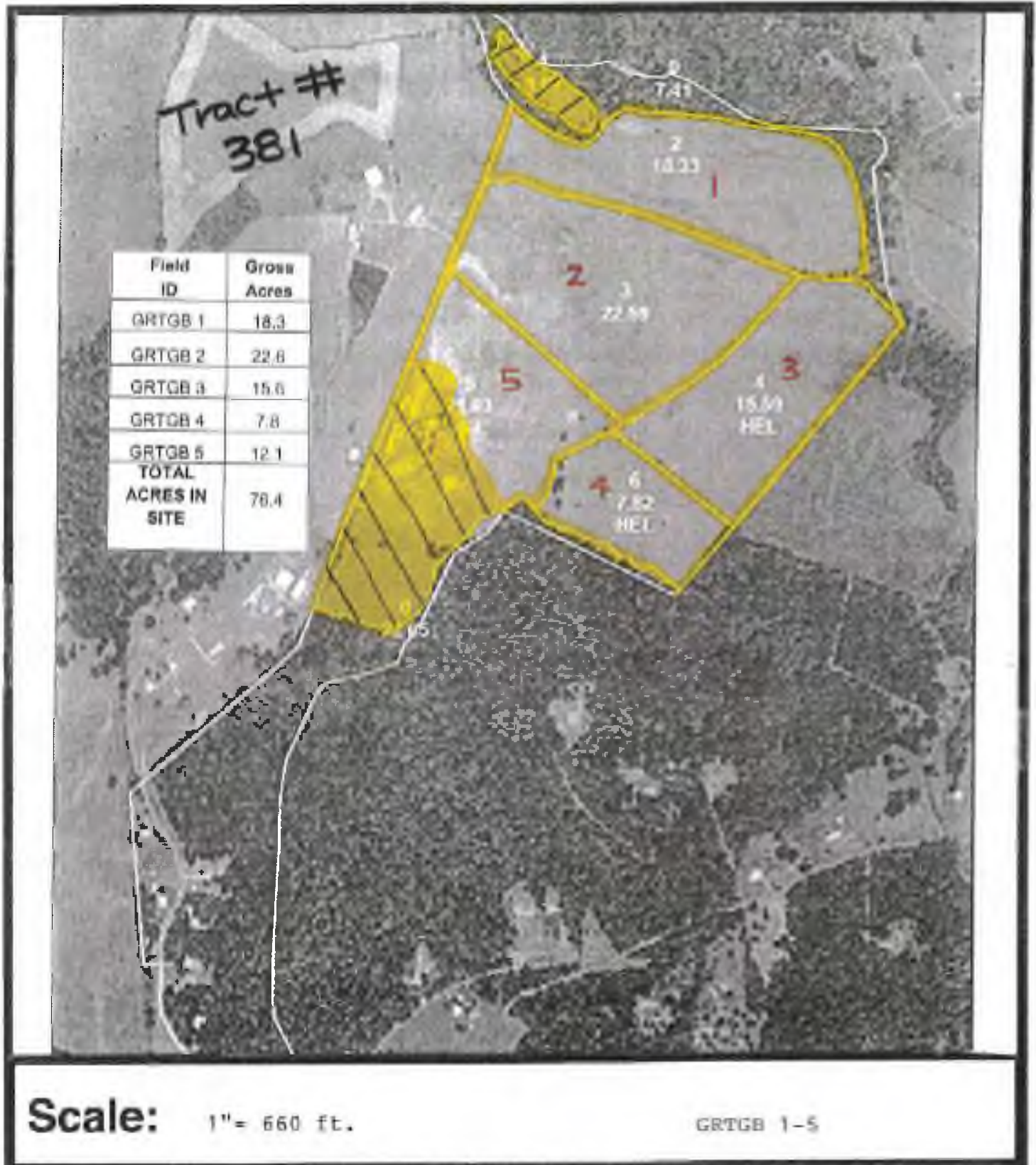
GRTGB 1-5

SOIL MAP

10-18-17

Frequent Flooding
marked in Orange








AERIAL MAP

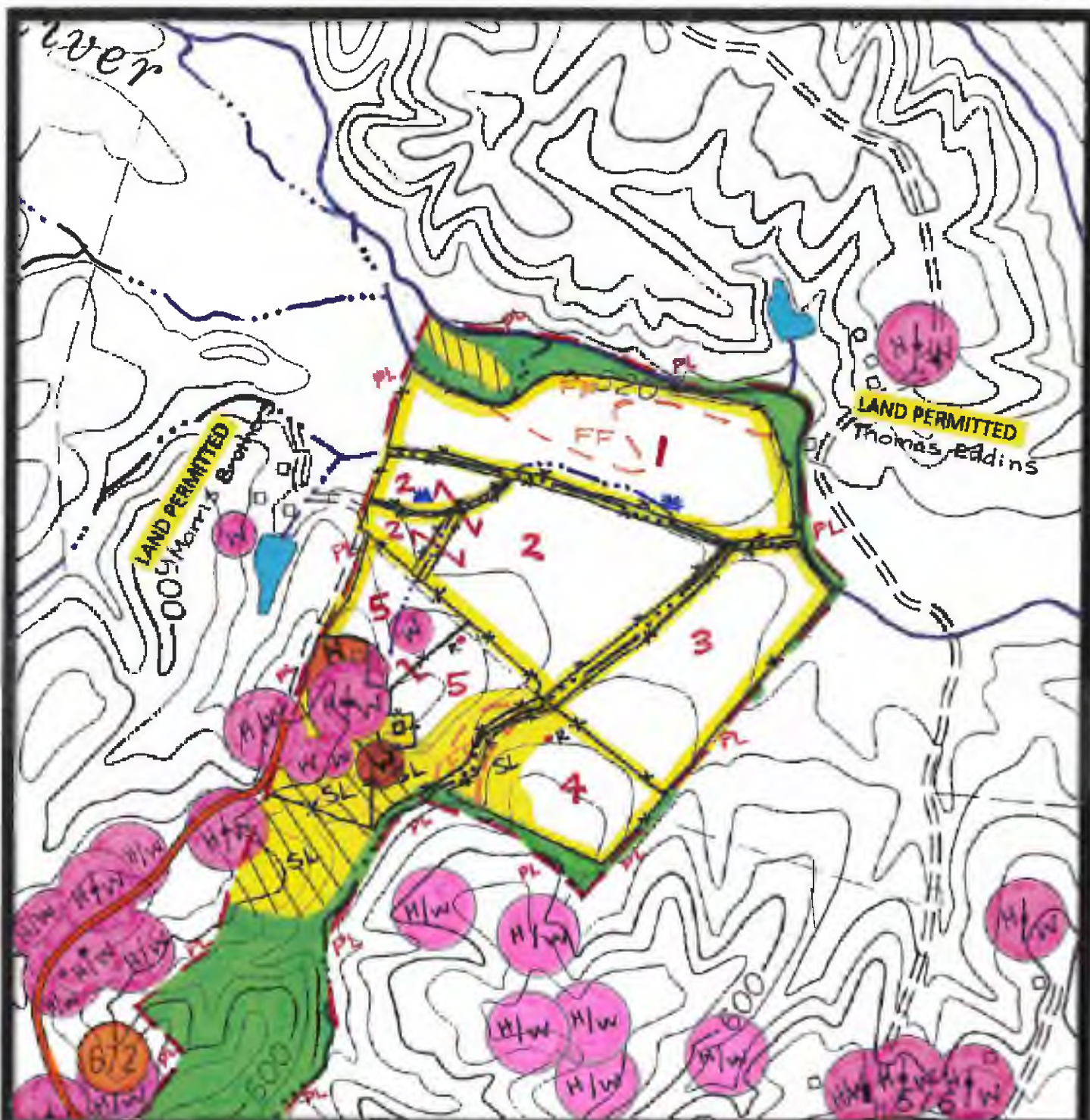
10-18-17



Legend For Site Plan

Symbol	Feature	Minimum Setback
	House and Well	200 feet from occupied dwelling * 100 feet from water supply wells or springs
	Well or Spring	100 feet from water supply wells or springs
	Streams or Surface Water	35 feet with 35 foot vegetated buffer 100 feet without vegetated buffer
	Wet Spot	
	Trees and Woods	
	Private Drive	
	Rock Area/Rock Outcrop	25 feet from rock outcrops 50 feet from limestone rock outcrops
	Severely Eroded Spot	18 Inch minimum depth of soil
	Sink Hole	100 feet from open sinkholes 50 feet from closed sinkholes
	State Road	10 feet from side of roadway
	Fence / Field Boundary	
	Property Line	100 feet from property line *
	Slope	15% maximum
	Hashed out Area	No application

*Buffer can be reduced or waived upon written consent from landowner.

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GRTGB 1-5

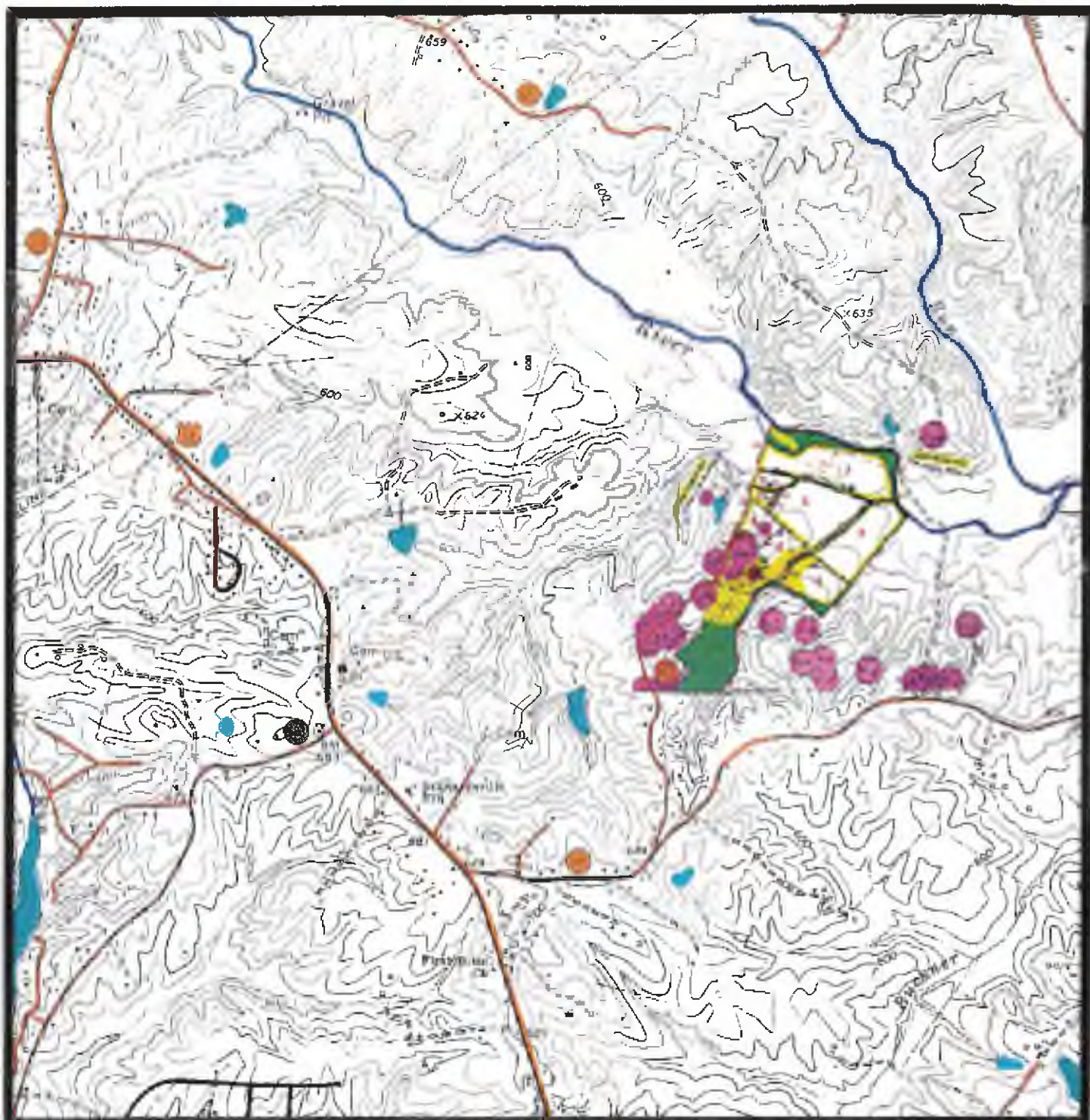
10-18-17



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Scale: 1" = 2000 ft.

GRTGB 1-5

TOPOGRAPHIC MAP

10-18-17

